STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92^{nd} Congress) as amended,

MO-0117307

Permit No.:

Owner: Owner's Address:	Rockwood Pigments, Inc. 7101 Muirkirk Road, Beltsville, MO 20705						
Continuing Authority: Continuing Authority's Address:	Same as above Same as above						
Facility Name: Facility Address:	Rockwood Pigments NA, Inc. 303 East Hoffmeister, St. Louis, MO 63125						
Legal Description: Latitude/Longitude:	Sec. 19 projected, T44N, R7E, St. Louis County						
Receiving Stream: First Classified Stream and ID: USGS Basin & Sub-Watershed Number:	Unnamed Tributary to Mississippi River (P) Mississippi River (P) 01707 07140101-070004						
is authorized to discharge from the facility das set forth herein:	lescribed herein, in accordance with the effluent limitations and monitoring requirements						
FACILITY DESCRIPTION Outfalls #001 & #002 - Stormwater runoff f #2816 Outfall #001 Design flow is 2.35 MGD. Actual flow is 0.226 MGD. Outfall #002 Design flow is 3.45 MGD. Actual flow is 0.234 MGD.	from facility engaged in the production of synthetic iron oxide for paint pigments - SIC						
Elimination System; it does not apply to oth the Law. September 9, 2005	charges under the Missouri Clean Water Law and the National Pollutant Discharge er regulated areas. This permit may be appealed in accordance with Section 644.051.6 of						
Effective Date	Doyle Childers, Director, Department of Natural Resources Executive Secretary, Clean Water Commission						
September 8, 2010							
Expiration Date	Edward Galbraith, Director of Staff, Clean Water Commission						
MO 780-0041 (10-93)							

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 2 of 5

PERMIT NUMBER MO-0117307

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

		FINAL EFF	FLUENT LIM	IITATIONS	MONITORING REQUIREMENTS		
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY MONTHLY AVERAGE AVERAGE		MEAS UREMENT FREQUENCY	SAMPLE TYPE	
Outfalls #001 & #002							
Flow	MGD	*		*	once/quarter**	24 hr. estimate	
Chemical Oxygen Demand ₅	mg/L	120		90	once/quarter**	grab***	
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab***	
pH – Units	SU	****		****	once/quarter**	grab***	
Temperature	°C	*		*	once/quarter**	grab***	
Oil and Grease	mg/L	15		10	once/quarter**	grab***	
Total Ammonia	mg/L	****		****	once/quarter**	grab***	
Sulfate	mg/L	*		*	once/quarter**	grab***	
Iron, Total Recoverable	mg/L	20		20	once/quarter**	grab***	
Iron, Dissolved	mg/L	1.5		1.0	once/quarter**	grab***	
Zinc, Dissolved	mg/L	0.880		0.440	once/quarter**	grab***	

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE January 28, 2006.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED $\underline{Part\ I}$ STANDARD CONDITIONS DATED $\underline{October\ 1,\ 1980}$ and $\underline{August\ 15,\ 1994}$, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** Sample once per quarter in the months of February, May, August, and November.
- *** A representative grab sample shall be collected 30 to 60 minutes after a stormwater discharge begins.
- **** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- ***** Data submitted for total ammonia must meet acute limitations in 10-CSR 20-7.031 table B. Monitoring for pH and temperature shall be conducted while measuring total ammonia in water samples. This table is reproduced as Table 1 (below).

Note 1 – See Total Toxic Organics, Page 4.

TABLE 1
AMMONIA LIMITS FOR LAPORTE PIGMENTS, INC.

Acute Criteria for Total Ammonia: General Warm-Water Fishery (mg/l)

Temp.			pН										
°C	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
4	50.6	46.9	42.0	36.0	29.4	22.8	16.8	11.9	7.6	4.8	3.1	2.0	1.3
6	49.4	45.8	41.0	35.2	28.7	22.3	16.4	11.6	7.4	4.7	3.0	2.0	1.3
8	48.3	44.8	40.1	34.4	28.1	21.8	16.1	11.4	7.3	4.7	3.0	2.0	1.3
10	47.4	44.0	39.3	33.7	27.6	21.4	15.8	11.2	7.2	4.6	3.0	2.0	1.3
12	46.6	43.2	38.7	33.2	27.1	26.0	15.6	11.1	7.1	4.6	3.0	2.0	1.3
14	45.9	42.5	38.1	32.7	26.7	20.8	15.4	10.9	7.0	4.5	3.0	2.0	1.3
16	45.3	42.0	37.6	32.3	26.4	20.5	15.2	10.8	7.0	4.5	3.0	2.0	1.4
18	44.8	41.5	37.2	32.0	26.1	20.3	15.1	10.8	7.0	4.5	3.0	2.0	1.4
20	44.4	41.2	36.9	31.7	25.9	20.2	15.0	10.7	6.9	4.5	3.0	2.0	1.4
22	44.1	40.9	36.6	31.5	25.8	20.1	14.9	10.7	6.9	4.6	3.0	2.1	1.5
24	43.9	40.7	36.5	31.4	25.7	20.0	14.9	10.7	7.0	4.6	3.1	2.2	1.6
26	40.8	37.9	34.0	29.0	24.0	18.7	14.0	10.0	6.6	4.4	3.0	2.1	1.5
28	35.5	33.0	29.6	25.5	20.9	16.3	12.2	8.8	5.8	3.9	2.7	1.9	1.4
30	31.0	28.7	25.8	22.2	18.3	14.3	10.7	7.8	5.1	3.4	2.4	1.7	1.3

C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
- 4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 μ g/L);
 - (2) Two hundred micrograms per liter (200 μ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- (c) That the effluent limit established in part A of the permit will be exceeded.
- 5. Report as no-discharge when a discharge does not occur during the report period.

6. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses:
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;

C. SPECIAL CONDITIONS (continued)

- (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
- (5) There shall be no significant human health hazard from incidental contact with the water;
- (6) There shall be no acute toxicity to livestock or wildlife watering;
- (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
- (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.